

#### Montgomery County Maryland Department of Permitting Services

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# Guidelines

Voluntary Certification Program for Visit-Ability and Live-Ability in Single Family Attached and Detached Homes New Construction & Renovation March, 2007

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## **Introduction and Purpose**

Design for Life **Montgomery** is Maryland's first voluntary home certification program for new home building and renovation in single family attached and detached homes in Montgomery County. Design for Life **Montgomery** certification will help assure that homes certified by the program will continue to meet the needs of the occupants and be welcoming to their guests for many years.

This voluntary program was developed with participation by the building community, organizations representing seniors and people with disabilities, County government, as well as private and public organizations whose goal is to increase the number of houses available in the County that include features important to our growing and diverse community. To strengthen a person's ability to do this, legislation entitled Zoning Text Amendment 06-17, Accessibility Improvements-Exemption was passed by the Montgomery County Council in July, 2006. This legislation permits people to modify access to their homes "by right" rather than requiring them to submit to the Board of Appeals for a zoning variance.

Features included in the Design for Life Montgomery program generally follow principles found in the national Visit-Ability movement and studies of an emerging design principle called Universal Design. This unique program was specifically designed to meet minimal accessibility standards and is **not** intended to meet the requirements of the Federal Fair Housing Amendments Act of 1988, the Americans with Disabilities Act, or of Universal Design. There are no additional permitting costs, beyond the standard fees. This program offers benefits to all parties concerned.

#### BENEFITS TO THE HOMEOWNER/HOMEBUYER

Welcomes all visitors

Easier to live in

Easier to maneuver

Provides more comfort for children, adults and seniors with mobility needs

Reduces the risk of falling

Enhances your everyday life style

Provides home for life

#### BENEFITS TO THE BUILDER

Targets new emerging markets

Offers cutting edge features

Recognition of superior product

Recognition of attention to buyer needs

Offers branding opportunities

#### BENEFITS TO THE COMMUNITY INCLUDE

Increased neighborhood continuity

Promotes inclusion of all population segments

Design for Life **Montgomery** is a two-tiered certification program

**Level I** — **Visit-Ability** meaning that the home has at least one no step entrance located at the front door, back door, side door (any door), deck or through the garage; 36 inch front door and hallways; a useable bathroom with a 32 inch wide door; and a place to visit on that level.

**Level II** — **Live-Ability** includes all items in Level I, but also requires a circulation path that connects the accessible entrance to at least one bedroom, full bath, and kitchen.

## **Administration Procedure**

- $\textbf{1.} \ \, \textbf{Applicant must indicate on the permit application that the building design includes:} \\$ 
  - A) Visit-Ability or B) Live-Ability per Montgomery County Guidelines.
- 2. Applicant must submit two sets of construction drawings including site plans drawn to scale showing the accessible route from parking to accessible building entrance.
- 3. After final building inspection, DPS will issue Montgomery County Voluntary Certificate.

## **Definitions**

**Accessible:** Describes a site, building, facility, or portion thereof that complies with this certification standard.

**Accessible route:** An interior or exterior circulation path that complies with the appendix.

**Building entrance:** Any entrance that allows passage to the visit-able portion of the building.

**Circulation path:** An interior or exterior way of passage from one place to another for pedestrians.

**Construction Tolerance:** All dimensions are subject to conventional industry tolerances; 1 inch plus or minus.

## Requirements (Level I Accessibility that provides Visit-Ability):

- 1. At least one entrance shall have a no step entry at the front door, back door, side door (any door), deck or through the garage on an accessible route. The accessible route shall extend from a vehicular drop off, or parking to a no step building entrance. Accessible routes shall consist of one or more of the following components:
  - Walking surfaces with a slope not steeper than 1:20.
  - Doorways, ramps, curb ramps, elevators, and wheelchair (platform) lifts.
  - Floor or ground surfaces shall be stable, firm, and slip resistant.
- 2. Dwelling units with a building entrance on an accessible route shall be designed in such a manner that all the doorways designed to allow passage into and within all areas required to be accessible in item 3 below, have a clear opening width of at least 32 inches when the door is open 90 degrees, measured between the face of the door and the stop. Openings more than 24 inches in depth are not considered doorways.
- **3.** Dwelling units with a building entrance on an accessible route shall have a circulation path that is at least 36-inches wide. The circulation paths shall connect the accessible entrance to at least one powder room or bathroom, and one other room that can accommodate visitation.
- **4.** The powder room/bathroom on the circulation path shall be large enough to accommodate a clear space of 2'-6" by 4'-0" within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed.

## **Requirements (Level II Accessibility that provides Live-Ability):**

- 1. At least one entrance shall have a no step entry at the front door, back door, side door (any door), deck or through the garage on an accessible route. The accessible route shall extend from a vehicular drop off, or parking to a building entrance. Accessible routes shall consist of one or more of the following components:
  - Walking surfaces with a slope not steeper than 1:20.
  - Doorways, ramps, curb ramps, elevators, and wheelchair (platform) lifts.
  - Floor or ground surfaces shall be stable, firm, and slip resistant.
- 2. Dwelling unit(s) with a building entrance on an accessible route shall be designed in such a manner that all the doorways designed to allow passage into and within all areas required to be accessible in item 3 below, have a clear opening width of at least 32 inches when the door is open 90 degrees, measured between the face of the door and the stop. Openings more than 24 inches in depth are not considered doorways.
- **3.** Dwelling unit(s) with a building entrance on an accessible route shall have a circulation path that is at least 36-inches wide. The circulation paths shall connect the accessible entrance to at least one bathroom, kitchen, one bedroom and one other room that can accommodate visitation.
- **4.** Dwelling units with a building entrance on an accessible route shall be designed and constructed in such a manner that the accessible level contains a usable kitchen and bathroom such that a wheelchair user can maneuver about the space.
  - a. A usable kitchens shall comply with the following:
    - i. A clear floor space at least 30 inches by 48 inches that allows a parallel approach by a person in a wheelchair is provided at the range or cook top and sink, and either a parallel or forward approach is provided at oven, dishwasher, refrigerator or freezer, and trash compactor.
    - ii. Clearance between counters and all opposing base cabinets, countertops, appliances or walls is at least 36 inches.
    - iii. In U-shaped kitchens with sink or range or cook top at the base of the "U", a 60-inch turning radius is provided to allow parallel approach, or base cabinets are removable at that location to allow knee space for a forward approach.
- **5.** Bathroom on the accessible level shall conform to the following:
  - a. The bathroom shall contain at least one sink, one toilet and one shower or bathtub.
  - b. Where the door swings into the bathroom, there is a clear space of 2'-6" by 4'-0" within the room to position a wheelchair or other mobility aid clear of the path of the door as it is closed and to permit use of fixtures. This clear space can include any knee space and toe space available below bathroom fixtures.
  - c. Where the door swings out, a clear space of 2'-6" by 4'-0" is provided within the bathroom for a wheelchair user or a person using other mobility aid to position the wheelchair such that the person is allowed to use the fixtures. There shall be clear space to allow the wheelchair user to reopen the door to exit.

- d. When both tub and shower fixtures are provided in the bathroom, at least one is made accessible. When two or more lavatories in a bathroom are provided, at least one is accessible.
- e. The bathroom shall contain reinforcements in walls to allow later installation of grab bars around toilet, tub, shower stall and shower seat.

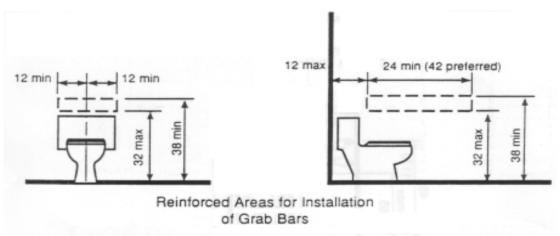


Fig. 3 Water Closets in Adaptable Bathrooms

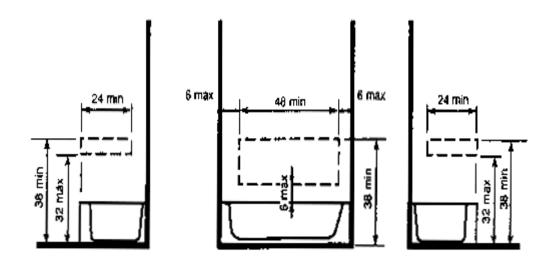


Fig 4: Location of Grab Bar Reinforcements for Adaptable Bathtubs

NOTE: The areas oulined in dashed lines represent locations for future installation of grab bars for typical fixture configurations.

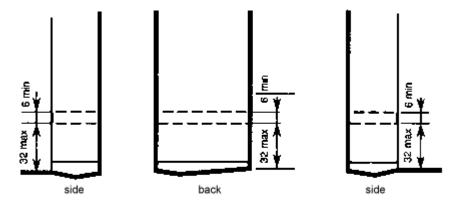


Fig. 5 Location of Grab Bar Reinforcements for Adaptable Showers

NOTE: The areas oulined in dashed lines represent locations for future installation of grab bars.

- f. In locations where toilets are adjacent to walls, bathtub, or vanity the center line of the fixture is a minimum of 1'-6" from the obstacle.
- g. Vanities and lavatories are installed with the centerline of the fixture a minimum of 1'-3" horizontally from an adjoining wall. If knee space is provided below the vanity, the bottom of the apron is at least 2'-3" above the floor. If provided, full knee space (for front approach) is at least 1'-5" deep.
- h. Bathtubs and tub/showers located in the bathroom provide a clear access aisle that is at least 2'-6" wide and extends for a length of 4'-0" (measured from the foot of the bathtub).
- i. Stall showers in the bathroom may be of any size or configuration. A minimum clear floor space 2'-6" wide by 4'-0" should be available outside the stall. If the shower stall is the only bathing facility provided in the dwelling unit, and measures a nominal 36" x 36", the shower stall must have reinforcing to allow for installation of an optional wall hung bench seat.

## **Alternative Design:**

Nothing in these requirements prevents the use of designs, products, or technologies as alternatives to those prescribed, provided they result in substantially equivalent or greater accessibility and usability.

#### **APPENDIX**

## **ACCESSIBLE ROUTES**

- **100. General.** Accessible routes shall comply with this appendix.
- **100.1 Components.** Accessible routes shall consist of one or more of the following components: walking surfaces with a running slope not steeper than 1:20, and ramps. All components of an accessible route shall comply with this appendix.

#### 101 Walking Surfaces

- **101.1 General.** Walking surfaces that are a part of an accessible route shall comply with 101.
- **101.2 Floor or Ground Surface.** Floor or ground surfaces shall comply with 103.
- **101.3 Slope.** The running slope of walking surfaces shall not be steeper than 1:20. The cross slope of walking surfaces shall not be steeper than 1:48.
- **101.4 Changes in Level.** Changes in level shall comply with 103.4.
- **101.5** Clearances. Walking surfaces shall provide clearances complying with 101.5.
- **101.5.1 Clear Width.** Except as provided in 101.5.2 and 101.5.3, the clear width of walking surfaces shall be 36 inches (915 mm) minimum.

**EXCEPTION:** The clear width shall be permitted to be reduced to 32 inches (815 mm) minimum for a length of 24 inches (610 mm) maximum provided that reduced width segments are separated by segments that are 48 inches (1220 mm) long minimum and 36 inches (915 mm) wide minimum.

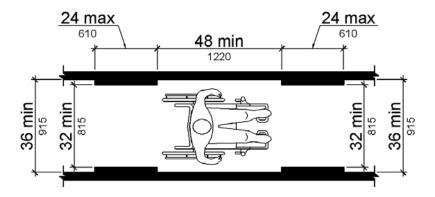


Fig. 1

**101.5.2 Clear Width at Turn.** Where the accessible route makes a 180 degree turn around an element which is less than 48 inches (1220 mm) wide, clear width shall be 42 inches (1065 mm) minimum approaching the turn, 48 inches (1220 mm) minimum at the turn and 42 inches (1065 mm) minimum leaving the turn.

**EXCEPTION:** Where the clear width at the turn is 60 inches (1525 mm) minimum compliance with 101.5.2 shall not be required.

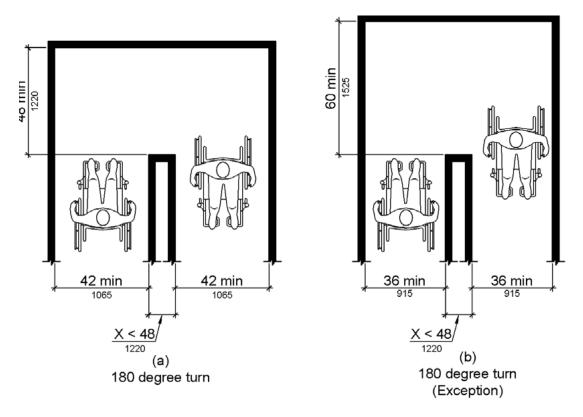


Fig.2

**101.5.3 Passing Spaces.** An accessible route with a clear width less than 60 inches (1525 mm) shall provide passing spaces at intervals of 200 feet (61 m) maximum. Passing spaces shall be either: a space 60 inches (1525 mm) by 60 inches (1525 mm) minimum; or, an intersection of two walking surfaces providing a T-shaped space complying with fig 3 where the base and arms of the T-shaped space extend 48 inches (1220 mm) minimum beyond the intersection.

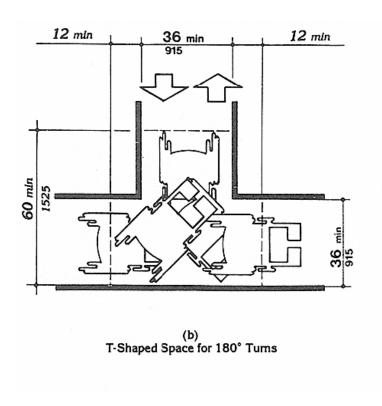


Fig.3

#### 102 Ramps

**102.1 General.** Ramps on accessible routes shall comply with 102.

**EXCEPTION:** In assembly areas, aisle ramps adjacent to seating and not serving elements required to be on an accessible route shall not be required to comply with 102.

**102.2 Slope.** Ramp runs shall have a running slope not steeper than 1:12.

**EXCEPTION:** In existing sites, buildings, and facilities, ramps shall be permitted to have running slopes steeper than 1:12 complying with Table 102.2 where such slopes are necessary due to space limitations.

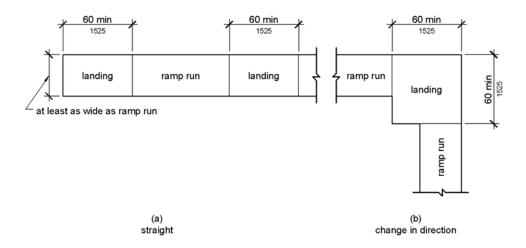
Table 102.2 Maximum Ramp Slope and Rise for Existing Sites, Buildings, and Facilities

Slope <sup>1</sup>	Maximum Rise
Steeper than 1:10 but not steeper than 1:8	3 inches (75 mm)
Steeper than 1:12 but not steeper than 1:10	6 inches (150 mm)

- 1. A slope steeper than 1:8 is prohibited
- **102.3 Cross Slope.** Cross slope of ramp runs shall not be steeper than 1:48.
- **102.4 Floor or Ground Surfaces.** Floor or ground surfaces of ramp runs shall comply with 103. Changes in level other than the running slope and cross slope are not permitted on ramp runs.
- **102.5** Clear Width. The clear width of a ramp run and, where handrails are provided, the clear width between handrails shall be 36 inches (915 mm) minimum.
- **102.6 Rise.** The rise for any ramp run shall be 30 inches (760 mm) maximum.
- **102.7 Landings.** Ramps shall have landings at the top and the bottom of each ramp run. Landings shall comply with 102.7.
- **102.7.1 Slope.** Landings shall comply with 103. Changes in level are not permitted.

**EXCEPTION:** Slopes not steeper than 1:48 shall be permitted.

- **102.7.2 Width.** The landing clear width shall be at least as wide as the widest ramp run leading to the landing.
- **102.7.3 Length.** The landing clear length shall be 60 inches (1525 mm) long minimum.
- **102.7.4 Change in Direction.** Ramps that change direction between runs at landings shall have a clear landing 60 inches (1525 mm) minimum by 60 inches (1525 mm) minimum.



**102.8 Handrails.** Handrails shall be provided where required by the applicable International Building Code (IRC/IBC) and shall be constructed in accordance with IRC.

**102.9 Edge Protection.** Ramps and landings with drop-offs shall have curbs, walls, railings, or projecting surfaces that prevent people from slipping off the ramp. Curbs shall be a minimum 2 in (50mm) high.

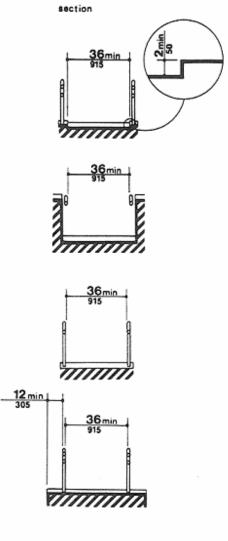
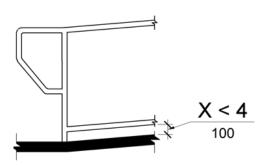


Figure 17
Examples of Edge Protection

**102.9.2 Curb or Barrier.** A curb or barrier shall be provided that prevents the passage of a 4 inch (100 mm) diameter sphere, where any portion of the sphere is within 4 inches (100 mm) of the finish floor or ground surface.

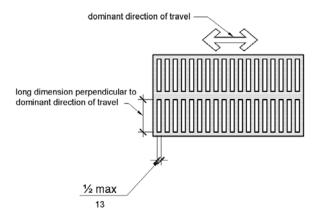


**104.** Guards. Guards shall be provided where required by the applicable International Building Code (IRC/IBC) and shall be constructed in accordance with IRC.

#### 105 Floor or Ground Surfaces

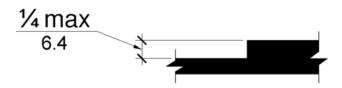
**105.1** General. Floor and ground surfaces shall be stable, firm, and slip resistant and shall comply with 105.

**105.2 Openings.** Openings in floor or ground surfaces shall not allow passage of a sphere more than ½ inch (13 mm) diameter. Elongated openings shall be placed so that the long dimension is perpendicular to the dominant direction of travel.



**105.3 Changes in Level.** Where changes in level are permitted in floor or ground surfaces, they shall comply with this section.

**105.3.1 Vertical.** Changes in level of ½ inch (6.4 mm) high maximum shall be permitted to be vertical.



**105.3.2 Beveled.** Changes in level between  $\frac{1}{4}$  inch (6.4 mm) high minimum and  $\frac{1}{2}$  inch (13 mm) high maximum shall be beveled with a slope not steeper than 1:2.

